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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-------------|----------------------|---------------------|------------------|
| 09/727,554 | 12/04/2000 | Masahiro Arai | 040679/1173 | 4320 |
| 22428 | 7590 | 11/09/2004 | EXAMINER | |
| FOLEY AND LARDNER SUITE 500 3000 K STREET NW WASHINGTON, DC 20007 | | | CORRIGAN, JAIME W | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 3748 | |

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/727,554

Applicant(s)

ARAI ET AL.

Examiner

Jaime W Corrigan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4 and 6-8 is/are allowed.
- 6) ☒ Claim(s) 1,5,9 and 10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 06 July 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to the Request for Reconsideration filed on 22 July 2004. Overall, claims 1-10 are pending in this application. The arguments with respect to the references applied in the previous Office Action were deemed persuasive, however, a new Non-final rejection is set forth below.

Claim Objections

Claims 3, 6 are objected to because of the following informalities:

Claims 3 and 6 should be shown with appropriate status identifiers in the listing of claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1, 5, 9-10 are rejected under 35 U.S.C. 102(a) as being anticipated by Nagaishi et al. (PN JP11-311135).

Regarding claims 1, 5 Nagaishi et al. discloses a method for controlling intake air (See Column 1 Lines 41-50, Column 2 Line 1) of an internal combustion engine, the engine having at least one combustion chamber (See Figure 2 (7)) provided with an intake valve (See Figure 2 (3)) together with an intake manifold (See Figure 2 (10))

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provided with a throttle valve (See Figure 2 (11)), wherein the opening and closure timings of the intake valve are adjustable (See Figure 2, Column 1 Lines 1-5, 41-50, Column 2 Line 1) independently from a crankshaft position to control the amount of intake air supplied to the combustion chamber, the method comprising: damping (See Column 3 Lines 34-43) an operating signal for the intake valve relative to a change in acceleration or deceleration (See Figure 12) demand on the engine, for unthrottled (See Figure 13, Column 3 Lines 34-43) intake air control.

Regarding claim 9 Nagaishi et al. discloses the operating signal is for timing the opening and closing of the intake valve (See Figure 2 (3), Column 1 Lines 1-5, 41-50, Column 2 Line 1).

Regarding claim 10 Nagaishi et al. discloses the operating signal is for regulating the air intake (See Column 1 Lines 41-50, Column 2 Line 1) into the combustion chamber (See Figure 2 (7)).

Allowable Subject Matter

Claims 2-4, 6-8 are allowed.

Response to Arguments

Applicant's arguments with respect to claims 1, 5, 9-10 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Komatsu et al. (PN 5,080,055), Arai et al. (PN 6,502,543) disclose similar timing systems and methods.

Any inquiry concerning this communication from the examiner should be directed to Examiner Jaime Corrigan whose Crystal City telephone number is (703) 308-2639 and the Carlyle telephone number (as of 11-23-04) is (571) 272-4858. The examiner can normally be reached on Monday - Friday from 8:30 a.m. – 6:00 p.m. 2nd Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion, can be reached on (703) 308-2623. The fax number for this group is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0861.

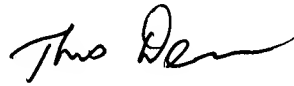
JC

Jaime Corrigan

Patent Examiner

November 01, 2004

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THOMAS DENION
SUPERVISORY PATENT EXAMINER
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